

SAMES, Rene, inz.; SUCHY, Zdenek, inz.

A trough for shifting the water stream at the construction site of Orlik water-power plant. Inz stavby 6 no.3:123-127  
Mr '58.

SAMES, Rene, inz.

Water resources survey in Ghana. Vodni hosp 13 no.2:62-65  
'63.

1. Hydroprojekt, Praha.

BOWSZYC, Jerzy; SAMET, Alfred

Studies on the level of benzathine G penicillin in the blood of patients with early syphilis. Przegl. dermat., 49 no.2:127-136 '62.

1. Z Kliniki Dermatologicznej AM w Gdansk Kierownik: prof. dr F. Miedzinski Z Zakladu Mikrobiologii AM w Gdansk Kierownik: prof. dr S. Krynski.

(PENICILLIN blood) (SYPHILIS ther)

POLAND

KRYNSKI, Stefan; BECLA, Eugeniusz; GALINSKI, Janusz and SAMET, Alfred;  
Regional Center for Typing of Staphylococci (Krajowy Ośrodek Typowania  
Gronkowcow) and Department of Microbiology of Medical College of the Academy  
of Medicine (Zakład Mikrobiologii Wydziału Lekarskiego AM) Gdansk.

"Strains of Staphylococcus aureus from the Area of the Gdansk Clinics and  
Hospitals."

Warsaw, Medycyna Doswiadczalna i Mikrobiologia, Vol 18, No 1, 1966; pp 1-5.

Abstract [English summary modified]: Analytical tabulation and discussion of  
the sources of isolation of 1052 strains of coagulase-positive S. aureus.  
Phage groups are reviewed, with discussion of causes for prevalence of  
some pathogenic strains in specific environments around patients. Table,  
diagram, 5 Polish including 1 unpublished and 6 Western references.

~~SAVET~~ I.M.; FEDOROVSKIY, M.V. [Fedorovs'kyi, M.V.]

Historical development of the sintering of iron ore. Nar. z ist.  
tekh. no.6:99-109 '60. (MIRA 13:11)

(Iron--Metallurgy)

SHTETS, Konstantin Aleksandrovich, dotsent, kand.tekhn.nauk; LIBERMAN,  
Lazar' Moiseyevich, dotsent, kand.tekhn.nauk; SAMET, Ioel'  
Markovich, dotsent, kand.ekonom.nauk; CHUMACHENKO, T.I., red.;  
SHAFETA, S.M., tekhn.red.

[Industrial organization and planning in steel plants]  
Organizatsiia i planirovanie proizvodstva na metallurgicheskikh  
predpriiatiakh. Kiev, Gos.izd-vo tekhn.lit-ry USSR, 1961.  
693 p. (MIRA 15:5)

(Iron industry)

(Steel industry)

SHTETS, K.A.; SAMET, I.M.; CHESAK, V.N.

Economic efficiency of the automatic control of open-hearth  
furnace plants. Izv. vys. ucheb. zav.; chern. met. 6 no.8:  
185-191 '63. (MIRA 16:11)

1. Khar'kovskiy inzhenerno-ekonomicheskii institut.

SHTETS, K.A.: SAMET, I.M.; CHESAK, V.N.

Optimum campaign length of an open-hearth furnace. Izv. vyb.  
ucheb. zav.; Chern. met. 7 no.8:208-212 '64. (MIRA 17:9)

1. Khar'kovskiy inzhenerno-ekonomicheskii institut.



SAMET, M., inzh.; IVANOV, B., inzh.; LINDE, Ye., inzh.

Parquet floors with a sand foundation. Zhil. stroi. no. 9:2-29,  
S '61. (MIRA 14:9)

(Parquet floors) (Soundproofing)

PA 1T75

SAMET, M. M.

USSR/Medicine - Epidemiology

Feb 1947

"On the Efficiency of Active Immunization Against  
Whooping Cough," M M Samet, 1 p

"Byul Eksper Biol I Med" Vol XXIII, No 2

Review of a dissertation

1T75

SAMET, M. M.

Samet, M. M. "Prophylaxis of whooping cough," Trudy VI Vsesoyuz. s'ezda det. vrachey, posvyashch. pamyati prof. Filatova, Moscow, 1948, p. 283-86

SO: U-3264, 10 April 1953, (Letopis 'Zhurnal 'nykh Statel, No. 3, 1949)

SAMET, M. M., LONDAR, M. S. and BONDARENKO, T. V. Epidemiological data on facit of whooping-cough in communal workers' settlements Pediatrya, Moscow 1949, 4 (52-56)  
Graphs 1 Tables 1

The authors report on the frequency of whooping cough among the workers' population, and study the effect of vaccination against this disease. It seems that the results are good (the vaccination being made in three hypodermic injections) and that whooping cough, if it spreads after vaccination, has a milder form and the typical whooping cough does not develop. They end with praise of the Russian methods of combating infectious disease. Leya--Basle

SO: Medical Microbiology and Hygiene Section IV, Vol. 3, No. 7-12

SAMET, M.O., inzh.; SOKOLIN, G.L., inzh.; CHEKHOVSKAYA, T.P., red. izd-  
va; OSENKO, L.M., tekhn. red.

[Plastering] Shtukaturnye raboty. Izd.2., ispr.i dop. Moskva,  
Gosstroizdat, 1962. 251 p. (MIRA 15:9)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut orga-  
nizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu.  
(Plastering)

SAMETS, M., nauchnyy sotrudnik.; STETSENKO, Ya., nauchnyy sotrudnik.

New method of breaking down coal. Mast. ugl. 7 no.10:20 0 '58,  
(MIRA 11:11)

1. Kuznetskiy nauchno-issledovatel'skiy ugl'nyy institut.  
(Coal mines and mining)

SHIROKOV, A., kand. tekhn. nauk; MAKSIMENKO, F.; SAMETS, M.; GAVRILENKO, A.

Mining steep coal seams without stope timbering in Kuznetsk Basin  
mines. Ugol' 34 no.8:55-59 Ag '59. (MIRA 12:12)

1.Kuznetskiy nauchno-issledovatel'skiy ugol'nyy institut (for Shi-  
rokov, Samets). 2.Glavnyy inzhener shakhty "Krasnyy Uglekop", Kuzbass  
(for Maksimenko). 3.Zamestitel' glavnogo inzhenera shakhty "Krasnyy  
Uglekop," Kuzbass (for Gavrilenko).  
(Mining engineering)

SHIROKOV, A., kand.tekhn.nauk, SAMETS, M., inzh.

Mechanized working of steep beds in stopes. Bezop.truda v prom. 4  
no.11:8-9 N '60. (MIRA 13:11)

1. Kuznetskiy nauchno-issledovatel'skiy ugol'nyy institut.  
(Kuznetsk Basin--Coal mines and mining)



SHIROKOV, Anatoliy Pavlovich; SAMETS, Mikhail Grigor'yevich; ZHUKOV, V.V.,  
otv. red.; SMIRENSKIY, M.M., red. izd-va; IL'INSKAYA, G.M., tekhn.  
red.

[Working coal seams without bracing up the area near the cut] Raz-  
rabotka ugol'nykh plastov bez krepleniia prizabbinogo prostranstva.  
Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po gornomu delu, 1961.  
169 p. (MIRA 14:9)

(Coal mines and mining)

SHIROKOV, A.P., kand. tekhn. nauk; SAMETS, M.G., inzh.

Efficiency of crushing and loosening coal in mining without  
men in the pit. Vzryv. delo no. 53/10:245-261 '63. (MIRA 16:8)

1. Kuznetskiy nauchno-issledovatel'skiy ugol'nyy institut.  
(Kuznetsk Basin—Coal mines and mining)  
(Blasting)

INOYED, V.; ZHUSHENKOV, V.; KOROTKOV, N.; SAMETS, E.; T BOLAFA, V.;  
BERESTOV, V.A., kand. veterinarnykh nauk, nauchnyy rukovoditel'

Use of protein hydrolysates in fur farming. Sbor. nauch. rab.  
stadi. Petrozav. gos. un. no.6:190-194 1962.

(MIRA 17:11)

1. Kafedra zootehniki Petrozavodskogo gosudarstvennogo  
universiteta.

ACC NR: AP7002609 SOURCE CODE: UR/0413/66/000/023/0117/0117

INVENTOR: Sametskiy, B.I.

ORG: none

TITLE: Method of electrochemical machining of inner tube surfaces.  
Class 48, No. 189276. [Announced by the Voronezh Machine Plant  
(Voronezhskiy mekhanicheskiy zavod)].

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no.  
23, 1966, 117

TOPIC TAGS: tube ~~machining~~, electrochemistry, metal machining

ABSTRACT: This Author Certificate introduces a method of electrochemical machining  
of inner tube surfaces by means of an electrode with a flexible conductor.  
To make possible the machining of tubes with various radii of bends,  
the movement of the electrode inside the tube is accomplished by means  
of electrolyte pressure. UDC: 621.357.75:621.357.8-462 [TD]

SUB CODE: 13/ SUBM DATE: 29Mar65/ ATD PRESS: 5113

Card 1/1

SAMETSKAYA, I.Ye. (Nikolayev)

Representation of a regular hexagon. Mat. v shkole no.1:57-58 Ja-F '61.  
(MIRA 14:3)

(Polygons)

16.5000  
16.1500

36973  
S/C44/62/000/003/009/092  
C111/C222

AUTHOR:

Sametskaya, I. Ye.

TITLE:

On a remarkable transformation and some applications

PERIODICAL:

Referativnyy zhurnal, Matematika, no. 3, 1962, 61,  
abstract 3A351. ("Izv. Krymsk. ped. in-ta", 1961, 35,  
269-277)

TEXT:

Considered is a transformation which allows one to transfer a pair of plane algebraic curves,  $f$  and  $\varphi$ , into a curve of higher order  $F(\varphi, f)$ , and to construct the points of the latter rather easily. This transformation is

$$x = x' = x''; \quad y = \pm \sqrt{y'y''} \quad (1)$$

( $x' = x''$  are the abscissas of the points of  $f$  and  $\varphi$ ;  $y'$  and  $y''$  are the corresponding ordinates defined by the equations  $f(x', y) = 0$ ,  $\varphi(x'', y) = 0$ ). For example, the construction of third order curves with symmetry axis leads to the construction of conics, and the latter is reduced to the construction of straight lines. So, by applying transformation (1) twice, the construction of a third order curve is reduced to the construction of straight lines.

[Abstracter's note: Complete translation.]

Card 1/1

AUTHOR: Sametskiy, Ye.I.

SOV/130-58-6-3/20

TITLE: Recorder for the Operation of the Blast-furnace Charging Mechanism (Registrator raboty zagruzochnogo ustroystva domennoy pechi)

PERIODICAL: Metallurg, 1958, Nr 6, pp 4 - 5 (USSR).

ABSTRACT: The author briefly describes a system of recorders which has been in successful use at Nr 4 blast furnace at the Stalino Metallurgical Works for a year. The angle of rotation of the distributor is recorded with an accuracy of up to  $1.5^{\circ}$  as are the opening of the large and small bells, the number of ore and coke skips charged and the starting and finishing times of these operations. He gives a figure showing the circuits and locations of instruments and devices. There is 1 figure.

ASSOCIATION: Stalinskiy metallurgicheskiy zavod (Stalino Metallurgical Works)

Card 1/1

1. Blast furnaces - Operation 2. Recording devices - Applications

SOV/130-58-6-14/20

AUTHOR: Sametskiy, Ye.I.

TITLE: Instruments for Recording Technological Processes in Rolling (Pribory dlya registratsii tekhnologicheskikh protsessov prokatki)

PERIODICAL: Metallurg, 1958, Nr 6, pp 30 - 31 (USSR)

ABSTRACT: With the object of automatically recording for subsequent analysis the operation of various units involved in the rolling of a series, suitable instruments was developed and installed at the Staling Metallurgical Works by the departments of instrumentation and automation. The author briefly describes some of these. In the sheet mill, a system (Figure 1) has been in operation for two years on the three-high mill recording the following: number of passes and reduction in each; time required for each pass and for complete rolling of an ingot or slab; number of manipulations, the time required for each and the durations of stoppages. The recording is effected with a modified type EPP-09 potentiometer. A type MK-2 motor moves the chart, while a D-32 motor, controlled by a signal depending on roll position and amplified by an EU-42 electronic amplifier. The system gives a record of the movement of the top roll, a

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SOV/130-58-6-14/20

Instruments for Recording Technological Processes in Rolling

synchronous motor printing on a time scale. On the blooming mill, the author states, an installation consisting of a recorder of the operation of the stand and a photo-electrical pyrometer (type FEP-3) has been in successful use for over a year. It records, in addition to the above parameters, the time interval between the ingot arriving at the mill and at the first pass, number of ingots rolled and the ratio of the actual to required rolling temperature. In the latest modification of the device, the temperature on a single chart is used for all records, including temperature. There are 2 figures.

ASSOCIATION: Stalinskiy metallurgicheskiy zavod  
(Stalino Metallurgical Works)

Card 2/2

1. Rolling mills - Equipment
2. Rolling mills - Operation
3. Recording devices - Performance

SAMEYSHCHEV, A.A., inzh.; SOKOL'SKIY Ye.I., inzh.; FIRSOVA, L.N., inzh.;  
TIMCHENKO, N.K., inzh.; NISNEVICH, M.L., kand.tekhn.nauk

Concentrating limestone with the aid of a mechanical classifier.  
Stroi. mat. 7 no.4:23-26 Ap '61. (MIRA 14:5)  
(Limestone) (Sorting devices)

SAMGIN, A., professor.

Organization of underground network ("Underground engineering network of a city" by M.M. Porfir'ev, S.P. Zaitsev. Reviewed by A. Samgin). Zhil.-kom.khoz. 6 no.7:30 '56. (MLRA 10:2)

(Civil engineering)  
(Porfir'ev, M.M.)  
(Zaitsev, S.P.)

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26.2/22

S/129/60/000/009/002/009  
E193/E483

AUTHORS: Kolomytsev, P.T., Candidate of Technical Sciences,  
Samgin, A.A. and Snetkov, A.Ya., Engineers

TITLE: Structure and Composition of the Surface Layer of Gas  
Turbine Blades

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov,  
1960, No.9, pp.7-11

TEXT: The gas turbine blades studied in the course of the present investigation were made of several batches of the EI437A alloy, containing 19.5% Cr, 2.2 to 2.7% Ti and 0.55 to 0.7% Al. The manufacturing process entailed deformation of the blade surface to a depth of 15 to 30 microns. Specimens of the material exposed to the maximum temperature (730 to 750°C) were cut from blades that had been in service for 250 to 1110 h, and the structure of the surface layer was studied by spectrographic analysis of consecutively removed layers, X-ray analysis, microhardness measurements and metallographic examination. It was found that the surface layers of the blades studied consisted of:  
1) a finely-grained recrystallized outer layer; 2) a work-hardened layer, characterized by increased hardness and larger lattice

Card 1/2

83239

S/129/60/000/009/002/009  
E193/E483

Structure and Composition of the Surface Layer of Gas Turbine  
Blades

parameter of the solid solution matrix; 3) a layer of undeformed material. The content of alloying additions in the surface layer was different from the nominal composition of the alloy. It was concluded that the harmful effect of surface hardening on the high temperature strength of the blades is due to the formation of a steep gradient in the magnitude of the lattice parameter of the alloy at high temperatures and to the presence of large internal stresses. The formation of surface cracks after prolonged service at elevated temperatures was attributed to the reduced content of the alloying additions in the surface layer of the blades. There are 7 figures, 1 table and 5 references: 4 Soviet and 1 French. ✓

Card 2/2

GRACHEV, A.V., dotsent; KORENEVSKIY, S.M., inzh.; SAMGIN, A.N., inzh.;  
SHCHEKIN, R.V., inzh.; LOBAYEV, B.N., prof., doktor tekhn.nauk.  
obshchiy red.; PECHKOVSKAYA, O., vedushchiy red.; VUYEK, M.,  
tekhn.red.

[Heating and ventilation of apartment houses of few stories]  
Teplosnabzhenie i ventilyatsiya maloetazhnykh zhilykh zdaniy.  
Pod red. B.N.Lobaeva. Kiev, Gos.izd-vo tekhn.lit-ry USSR, 1954.  
238 p. (MIRA 12:3)

1. Deystvitel'nyy chlen Akademii arkhitektury USSR (for Lobayev).  
(Heating) (Ventilation)

SAMGIN, A.N. (Kiyev)

New gas-fired boilers for hot-water heating and hot-water supply  
in apartments. Vod.1 san.tekh. no.7-6-8 J1 '59.  
(MIRA 12:9)

(Boilers)

SAMGIN, A. N.

Cand Tech Sci - (diss) "Residence systems of water heating and new boilers with the use of natural gas." Kiev, 1961. 19 pp; with diagrams; (Academy of Construction and Architecture Ukrainian SSR); 200 copies; price not given; (KL, 7-61 sup, 245)



SIROTKIN, Vasiliy Pavlovich, prof., doktor tekhn. nauk; DVORYASHIN,  
V.I., prof., doktor tekhn. nauk, retsenzent; SAMGIN, A.N.,  
prof., retsenzent; KOLODYAZHNAYA, Zh.A., red.

[Water intakes; models, diagrams, and hydraulic calculations]  
Vodopriemnye sooruzhenia; tipy, skhemy, gidravlicheskie ras-  
chety. Moskva, Vysshaia shkola, 1965. 79 p. (MIRA 18:6)

SAMGIN, Andrey Nikolayevich, prof.; SIROTKIN, V.P., doktor tekhn. nauk, prof., retsenzent; ZANEVSKIY, M.S., kand. tekhn. nauk, dots., nauchnyy red.; NIKOLAYEVA, T.D., red. izd-va; GARINA, T.D., tekhn. red.

[Water supply, sewerage and improvement of sanitary conditions in populated places] Vodosnabzhenie, kanalizatsiya i sanitarnaya ochistka naselennykh mest. Moskva, Vysshaya shkola, 1962. 258 p.

(Sanitary engineering)

(MIRA 15:11)

NIKOLAYEVA, V.G.; DUKHNINA, A.Ya.; POPOVA, E.M.; BAYEVICH, Yu.A.;  
SANGIN, I.B.; PERCHENKO, A.A.; LEVINSON, G.I.

Carbamide dewaxing of oil fractions. Trudy VNII NP no.7:253-263  
'58. (MIRA 12:10)

(Paraffins) (Urea)

NIKOLAYEVA, V.G.; RYABOV, M.N.; IVANYUKOV, D.V.; POPOVA, E.M.; SAMGIN, I.B.;  
ZLOTNIKOV, L.Ye.; DZHINCHARADZE, V.M.; SEN'KINA, M.I.; Prinimali  
uchastiye: KRYMOVA, N.N.; MALINOV, V.K.

Refining of heavy residual fuels by washing and separation.  
Khim.i tekhn.topl.i masel 7 no.5:26-31 My '62. (MIRA 15:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke  
nefti i gazov i polucheniya iskusstvennogo zhidkogo topliva,  
Moskovskiy neftepererabatyvayushchiy zavod i Vsesoyuznyy nauchno-  
issledovatel'skiy i konstruktorskiy institut khimicheskogo mashino-  
stroyeniya. 2. Moskovskiy neftepererabatyvayushchiy zavod (for  
Krymova, Malinov).

(Petroleum as fuel)

SAMGIN, P.A.

Chemical control of willow thickets on pastures. Nauka i pered.op.  
v sel'khoz. no.9:28-30 S '56. (MIRA 9:10)

1. TSentral'nyy nauchno-issledovatel'skiy institut lesnogo khozyaystva  
Leningrad.

(Willows) (Herbicides)

SAMGIN, P.A.; SHESTOPAL, Ya.V.; ZOSIMOVSKAYA, T.V.; GONCHAROV, Ye.R.

Chemical shrub control from the airplane. Zashch. rast. ot vred.  
i bol. 6 no.4:20-21 Ap '61. (MIRA 15:6)  
(Kalinin Province—Clearing of land)

SERGEYEVA, T.A.; SHAMAYEV, G.P., inzh.; SAMGIN, P.A.; SHUTOV, I.V., kand  
sel'skokhoz.nauk; KALASHNIKOV, K.Ya., kand.sel'skokhoz.nauk

Questions and answers. Zashch.rast.ot vred.i bol. 7 (MIRA 15:11)  
no.5:16, 41-43 My '62.

1. Nauchno-issledovatel'skiy institut po udobreniyam i insektofungitsidam imeni Ya.V.Samoylova (for Sergeyeva). 2. Nauchno-issledovatel'skiy institut lesnogo khozyaystva (for Samgin, Shutov). 3. Pushkinskaya baza Vsesoyuznogo instituta zashchity rasteniy (for Kalashnikov).  
(Plants, Protection of)

SAMGIN, Yu.S.

New test boring devices. Razved. i okh. nedr 27 no. 3:26-31 Mr '61.  
(MIRA 14:5)

1. Ministerstvo geologii i okhrany nedr SSSR.  
(Boring machinery)



SAMGIN, Yu.S.

Mechanization of lowering and hoisting of casing pipes in  
test drilling. Razved. i okh. nedr 27 no.6:16-19 Je '61.  
(MIRA 14,9)

1. Ministerstvo geologii i okhrany nedr SSSR.  
(Automatic control) (Hoisting machinery)

SAMGIN, Yu.S.; KRYZHANOVSKIY, V.A., red.izd-va; IYERUSALIMSKAYA, Ye.,  
tekhn. red.

[Safety in exploratory drilling] Bezopasnost' na razvedochnom  
bureni. Moskva, Gosgeoltekhizdat, 1962. 62 p. (MIRA 16:4)  
(Boring—Safety measures)

SAMGIN, Yuriy Sergeyevich; KRYZHANOVSKIY, V.A., red. izd-va;  
~~TYERUSALIMSKAYA, Ye., tekhn. red.~~

[New devices for mechanizing auxiliary operation in drilling]  
Novye prisposobleniia dlia mekhanizatsii vspomogatel'nykh ope-  
ratsii pri burenii. Moskva, Gosgeoltekhizdat, 1962. 47 p.  
(MIRA 16:3)

(Oil well drilling--Equipment and supplies)

SAMGIN, Yu.S.

Further development of the volunteer design and engineering bureau is the task of production and trade union leaders.  
Razved. i okh. nedr 29 no.11:58-59 N '63.

(MIRA 17:12)

1. Gosudarstvennyy geologicheskiiy komitet SSSR.

VOLKOV, A.S.; SAMGIN, Yu.S., otv. red.; KRAYNOV, S.V., nauchn.  
red.

[Collection of the best efficiency suggestions] Sbor-  
nik luchshikh ratsionalizatorskikh predlozhenii. Mo-  
skva, Gosgeoltekhizdat, Pt.1. [Boring] Eurovye raboty.  
1963. 65 p. (MIRA 18:2)

1. Russia (1923- U.S.S.R.) Geologicheskiiy komitet. Otdel  
nauchno-tekhnicheskoy informatsii.

KRIKUNOVA, L.P.; SAMGIN, Yu.S.

Let the workers have broader participation in the control of production. Razved. i okh. nedr. 30 no.5:55-56 My '64.

(MIRA 17:10)

1. Tsentral'nyy komitet professional'nogo soyuza raboshikh geologorazvedochnykh rabot (for Krikunova). 2. Gosudarstvennyy geologicheskiy komitet SSSR (for Samgin).

BALAKHONOV, A.S.; SANGIN, Yu.S., otv. red.

[Collection of inventions for geological prospecting]  
Sbornik izobretenii po geologorazvedochnym rabotam. Mc-  
skva, Nedra, Pt.1. 1965. 309 p. (MIRA 18:8)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy geologicheskii  
komitet.

S/058/62/000/012/026/048  
A160/A101

AUTHOR: Samgina, G. A.

TITLE: The resonance method of measuring the velocities of sound in liquids

PERIODICAL: Referativnyy zhurnal, Fizika, no. 12, 1962, 65, abstract 12G611  
(In collection: "Primeneniye ul'traakust. k issled. veshchestva".  
M., no. 16, 1962, 33 - 37)

TEXT: The velocities of sound were measured in emulsions by the resonance method. The obtained value of the velocity of sound in liquids filling the tube differs from that measured in an infinite liquid due to elastic vibrations of the tube walls, which decrease the speed. Kortevog's formula was used for determining the sound velocity in an infinite medium. A diagram is presented of the working installations, and a description given of its operation. Preliminary measurements revealed that the number of the resonance maxima, observed during a smooth increase of the length of the water column in the tube, was higher than expected. The speed-measuring error did not exceed 1%, and even in unfavorable cases it attained 2%.

I. Nikolayeva

[Abstracter's note: Complete translation]

Card 1/1



L 46292-65 EWT(1)/T/EWP(k) Pf-4/P1-4

ACCESSION NR: AR5012303

UR/0058/65/000/003/H079/H080

SOURCE: Ref. zh. Fizika, Abs. 3Zh492

AUTHOR: Samgina, G. A.; Kudryavtsev, B. B.

TITLE: Measurement of ultrasonic velocity in liquids in the 50-200 kc range

CITED SOURCE: Sb. <sup>21</sup>Primeneniye ul'traakust. k issled. veshchestva. Vyp. 18. M., 1963, 95-99

TOPIC TAGS: ultrasonic velocity, liquid ultrasonic velocity, acoustic interferometry

TRANSLATION: Ultrasonic velocity in liquids (water, benzene, CCl<sub>4</sub>) was measured at 20 and 23°C using an acoustic interferometer. The circuit diagram of a low frequency interferometer is shown and a method of fastening a barium titanate radiator is described in detail. Frequency was measured with a local oscillator wavemeter with an error  $\leq 0.1\%$ . The open surface of the liquid acted as a reflector. The liquid level was lowered by slowly draining it through a lateral outlet at the base of the cylinder. Liquid level was held constant with a cathetometer correct to 0.1 mm. Electrical diagrams of the equipment and a curve showing the relation be-

Card 1/2

L 46292-65

ACCESSION NR: AR5012303

0

tween transmitter and reflector for a frequency of 225 kilocycles (sheet thickness 9.57 mm) are shown. Velocity measurement error was not greater than 0.2%. A table showing the results of measurement of velocity in pure liquids and tabulated data for comparison are presented. Reaction curve sharpness and sensitivity of the method are a function of the type of contact between the measuring cylinder bottom and the sheets of barium titanate, and also a function of bottom thickness. The method allows measurements to be made in the interval of frequencies from several tens of kilocycles to ordinary interferometer frequencies. I. Nikolayeva

SUB CODE: GP

ENCL: 00

sh  
Card 2/2

L 65266-65 EWT(1)/EPF(n)-2/ETC(m) WW/GG

ACCESSION NR: AR5014407

UR/0058/65/000/004/E006/E006

SOURCE: Ref. zh. Fizika. Abs. 4E41

AUTHOR: Kudryavtsev, B. B.; Samgina, G. A. 44, 45

TITLE: Speed of sound in a liquid as an intramolecular property

CITED SOURCE: Sb. Primeneniye ul'traakust. k issled. veshchestva. Vyp. 18. M., 1963, 101-102

TOPIC TAGS: intramolecular mechanics, sound propagation, acoustic speed

TRANSLATION: The authors assume that the propagation of sound in a liquid may be represented as a process which consists of transferral of momentum from molecule to molecule and intramolecular energy transfer. The intramolecular transfer is characterized by the compressibility of a substance at absolute zero, and depends on the properties of the molecule.

SUB CODE: GP, NP

ENCL: 00

Card 1/1

L 16931-63

EWf(q)/EWT(m)/BDS AFFTC JD

S/076/63/037/004/023/029

AUTHOR: Samgina, G. A., Kudryavtsev, B. B.

53

TITLE: Speed of sound in iodine solutions

PERIODICAL: Zhurnal fizicheskoy khimii, V. 37, No. 4, 1963, 918-920

TEXT: The speed of ultrasound (frequency  $\approx 2$  megacycles) is measured in solutions of iodine in benzene, ether, and ethyl alcohol. The measurements are made with an ultrasonic interferometer which has an error of not to exceed 0.5%. The speed of sound in solutions of iodine in ether, ethanol, and benzene decreases with the increase in the concentration of iodine; the adiabatic compressibility varies inversely with concentration. The relation of the speed of sound in ethanol solutions of iodine and of the adiabatic compressibility have an anomalous nature which can be explained by the presence in the solution of equilibrium between the solvate complexes and aggregate molecules of  $I_2$ . There is 1 graph and 1 table.

SUBMITTED: June 18, 1963

Card 1/1

L 48925-65 EPT(n)-2/EED(b)-3/EWP(k)/EWT(1)/EWT(m) Pu-4 IJP(c) WW  
 ACCESSION NR: AP5011469 UR/0076/65/039/004/0902/0906

AUTHOR: Kudryavtsev, B. B.; Samgina, G. A.

TITLE: The speed of sound as an intramolecular property

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 4, 1965, 902-906

TOPIC TAGS: sound wave propagation, sonic velocity, molecular compressibility, liquid compressibility

ABSTRACT: The propagation of sound in liquids is treated as a process consisting of the transfer of an acoustic pulse of finite velocity both across the inter-molecular gaps and through the molecules themselves. Because different parts of molecules have different rigidities, the compressibility of molecules can be calculated only approximately. Calculations of the compressibility of diatomic molecules ( $H_2$ ,  $O_2$ ,  $N_2$ ,  $C_2$ ,  $Cl_2$ ,  $I_2$ ,  $Br_2$ ,  $Na_2$ ,  $Li_2$ ,  $K_2$ ) and simple organic compounds (carbon tetrachloride, benzene, chlorobenzene, toluene, acetone) lead to the conclusion that the compressibility of liquids is determined primarily by molecular interactions. Assuming that the volume of a liquid  $V$  consists of the volume occupied by the molecules themselves,  $V_0$ , and of the so-called free volume  $V_f$ , the authors write the following relation expressing the dependence of the

Card 1/2

L 48985-65

ACCESSION NR: AP5011469

sound velocity  $c$  on the compressibility  $\beta$ :

$$c \sim \sqrt{\frac{V}{\beta}} = \sqrt{\frac{V_0 + V_f}{\beta_0 + \beta_f}},$$

where  $\beta_0$  is the compressibility of the molecules and  $\beta_f$  the compressibility due to molecular interaction. The numerator of the above expression depends primarily on the intramolecular properties, while the denominator is determined by intermolecular properties. Hence, the authors conclude that the speed of sound in a liquid is highly dependent on the intramolecular properties, which are determined, on the one hand, by the finite compressibility of the molecules, and on the other, by the marked influence of molecular dimensions. Orig. art. has: 2 tables and 14 formulas.

ASSOCIATION: None

SUBMITTED: 13Nov63

NO REF SOV: 007

ENCL: 00 SUB CODE: GP

OTHER: 007

Card 2/2 *mb*

KUDRYAVTSEV, B.B.; SAMOLINA, G.A.

Speed of sound as an intramolecular property. Zhur. fiz. khim.  
39 no.4:902-906 Ap '65. (MIRA 19:1)

1. Submitted Nov. 13, 1963.

SAMHOKVALOVA, G.V.

Vitality of eggs of some races and hybrids of mulberry silkworms  
during prolonged winter storage. Vest. Mosk. un. Ser. 6: Biol.,  
pochv. 17 no.4:38-43 J1-Ag '62. (MIRA 15:9)

1. Kafedra entomologii Moskovskogo universiteta.  
(silkworms)



SAMIBAYEVA, K. Kh.

Dynamics of the nematode fauna of tobacco and rhizospheric  
soil. Uzb. biol. zhur. 7 no.5:5-7 '63. (MIRA 18:11)

1. Tashkentskiy gosudarstvennyy universitet imeni Lenina.

SANIBAYEV, M. KH.

"Formation of the Cortical Portion of the Motor Analysor in Man at the Time of Development of Voluntary Motions." Voronezh State Medical Inst., Samarkand-Voronezh, 1955.  
(Dissertation for the Degree of Candidate in Medical Sciences)

SO: Knizhnaya Letopis', No. 22, 1955, pp 93-105

SAMIBAYEV, M.Kh., kand.med.nauk

Development of cortical neurons of the human motor analyzer  
during the development of arbitrary movements. Med.zhur.Uzb.  
no.10:40-44 0 '58. (MIRA 13:6)

1. Iz kafedry nervnykh bolezney (ispolnyayushchiy obyazannosti  
zav. - dotsent M.I. Gabrielyan) Samarskanskogo gosudarstvenno-  
go meditsinskogo instituta imeni I.P. Pavlova.  
(CEREBRAL CORTEX)

SAMIBAYEV, M.Kh., assistant; TAMBOVTSEVA, V.G., assistant

Recuperative period of paralytic poliomyelitis from data of the  
Clinic for Nervous Diseases at the Samarkand Medical Institute  
for 1955-1957. Med. zhur. Uzb. no.3:62-64 Mr '60. (MIRA 15:2)

1. Iz kliniki nervnykh bolezney (zav. - dotsent M.I.Gabrielyan)  
Samarkandskogo gosudarstvennogo meditsinskogo instituta imeni  
I.P.Pavlova.

(SAMARKAND...POLIOMYELITIS)

GABRIELIAN, M.I.; SAMIBAYEV, M.Kh.; SHAMGUNOVA, S.B.

Analysis of vascular diseases of the brain as revealed by data  
from the Clinic for Nervous Diseases of the Samarkand Medical  
Institute. Zhur. nevr. i psikh. 61 no.5:705-706 '61. (MIRA 14:7)

1. Kafedra nervnykh bolezney Samarkandskogo meditsinskogo instituta  
imeni I.P.Pavlova.

(BRAIN—DISEASES)

SHMIRAYEV, M.Kh., present

Pressure in the brachial and temporal arteries in hypertension  
and in vascular diseases of the brain. Med. zhur. Uzb. no.4:  
41-45 Apr '63. (MIRA 17:4)

1. Iz kliniki nervnykh bolezney (zav. - prof. M.I. Gabrielyan)  
Samarkandskogo meditsinskogo instituta imeni I.P. Pavlova.

USSR/Farm Animals. Horses.

Abstr Jour: Ref Zhur-Biol., No 20, 1958, 92564.

Author : Samibekov, R.V.

Inst : Turkmen Agricultural Institute.

Title : Development of Young Horses of the Central Asiatic Breeds During the Training and Test Period.

Orig Pub: Tr. Turkmen. s.-kh. in-ta, 1957, 421-426.

Abstract: Young horses of Central Asiatic breeds (Karabair and Akhaltekin) which are undergoing training and receive rational feeding show a greater rate of growth under the following conditions: slow work tempo with a minimum of fast work; daily free motion in groups for at least 4 hours; giving each week 2 to 4 days of rest to the young horses in training; par-

Card : 1/2

BALEV, Viktor, inzh.; NAUMCHIK, Aleksei [Naumchik, Aleksey], inzh.; SAMICHKOV, Petko, inzh.; GANCHEV, Rumen, inzh.

The new construction of hammers responsible for the increased productivity of the mills at the hydroelectric-power stations. Elektroenergiia 13 no.4:11-14 Ap '62.

1. IE pri Bulgarskata akademiia na naukite (for Baley). 2. Gosudarstvennyy trest po organizatsiii rayonnykh elektrostantsiy i setey, Lvov (for Naumchik). 3. SZ "Elektrometal" (for Samichkov). 4. Toplodelektricheskaya tsentrala "Maritsa-iztok I" (for Ganchev).



SAMICHKOV, P., inzh.

Bimetallic casting of machine parts exposed to intense wear.  
Mashinostroene 12 no. 3:42-43 Mr '63

1. Gl. inzh., SZ "Elektrometal", Sofia.

SAMIGDZHANOV, A.A.

Study textbooks and popular scientific literature on  
physics in the Uzbek language during the 40 years of  
Soviet power (1917 to 1957). Trudy SAGU no.148:99-115  
'59. (MIRA 13:7)  
(Physics--Terminology) (Uzbek language--Technical Uzbek)

KAFENGAUZ, I.M.; SAMIGULIN, F.K.; KAFENGAUZ, A.P.

Study of the reactions of hydroxyl-containing oligomers of  
propylene oxide with phosphorus acid esters. Plast. massy  
no.4:13-15 '55. (MIRA 18:6)

ACC NR: AP6021449

(A)

SOURCE CODE: UR/0413/66/000/011/0073/0073

INVENTORS: Samigulin, F. K.; Kafengauz, I. M.; Kafengauz, A. P.

ORG: none

TITLE: A method for obtaining noncombustible polyesters. Class 39, No. 182330  
[announced by Vladimir Scientific Research Institute of Synthetic Resins  
(Vladimirskiy nauchno-issledovatel'skiy institut sinteticheskikh smol)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 11, 1966, 73

TOPIC TAGS: resin, synthetic material, polyester, polyester, polymer, phosphorus compound, hydrogen

ABSTRACT: This Author Certificate presents a method for obtaining noncombustible polyesters. The method involves treating heated polyesters (containing terminal hydroxyl groups) with chloral. To enlarge the assortment of noncombustible polymers, phosphorus-containing polyesters with active hydrogen at the phosphorus atom are used as the original polyesters. To increase the thermal stability of the chloral-ated polyesters, the latter may be heated at the temperature of 85—90C in a vacuum.

SUB CODE: 11/ SUBM DATE: 21Apr65

07/

Card 1/1

UDC: 678.85:678.674-9:547.446.1

KHAYRULLIN, A. (Ufa); SAMIGULLIN, A. (Ufa)

Comprehensive analysis of the economics of the petroleum industry.  
Vop. ekon. no.9:123-126 S '63. (MIRA 16:9)  
(Petroleum industry)

KHAYRULLIN, A.Kh.; SAMIGULLIN, A.S.

Certain problems in the determination of the effectiveness of capital investments in prospecting for oil and gas. Izv. vys. ucheb. zav.; neft' i gaz 7 no.9:113-115 '64.

(MIRA 17:12)

1. Ufimskiy otдел ekonomicheskikh issledovaniy AN SSSR.

SAMIGULLIN, A.S., red.; MALYSHEV, Yu.M., red.; GENKIN, I.B., red.  
KAYESHKOVA, S.M., ved. red.; POLOSINA, A.S., tekhn.red.

[Economic efficiency of capital investments in petroleum  
production] Ekonomicheskaya effektivnost' kapital'nykh  
vlozhenii v nefte dobyvayushchei promyshlennosti. Pod red.  
A.S.Samigullina, Yu.M.Malysheva, I.B.Genkina. Moskva,  
Gostoptekhnizdat, 1964. 217 p. (MIRA 17:3)

1. Akademiya nauk SSSR. Bashkirskiy filial, Ufa. Otdel eko-  
nomiki promyshlennosti.

L 16712-65 RAEM(c)/ESD(t)/RAEM(1)/SSD/AFWL/AS(ap)-2/AFTC(p)  
ACCESSION NR: AR5000779 S/0058/64/000/010/D037/D037

SOURCE: Ref. zh. Fizika, Abs. 10D287

AUTHORS: Samigullin, F. M.; Agishev, A. Sh.

TITLE: Installation for degassing of liquids and solutions

CITED SOURCE: Sb. Materialy Nauchn. konferentsii. Kazansk. gos. ped. in-t, 1962.  
Kazan'. 1963, 389-392

TOPIC TAGS: spin lattice relaxation, nuclear magnetic resonance, paramagnetic im-  
purity, degassing, vacuum equipment

TRANSLATION: A setup is described for removing paramagnetic impurities from samples for nuclear magnetic resonance research (for example, pure diamagnetic liquids are rid of oxygen). The installation is based on the method of "freezing--pumping--melting" the samples. The vacuum section is made of molybdenum glass and is connected to a

Card 1/2



L 16712-65

ACCESSION NR: AR5000779

TsVL-100 diffusion pump by a kovar junction. The preliminary vacuum is produced by a RVN-200 forevacuum pump. The pumped-out objects are connected to the installation through a collector with three valves and conical ground-glass junctions, which make it possible to connect different sorts of glass. A test tube with a junction, sealed to the stopper of the conical ground joint, is heated to  $\sim 400^{\circ}\text{C}$  under vacuum. The solution to be degassed is poured into the test tube and the sample is then frozen. The cycles are repeated until the pumping out of the sample takes place at the established maximum vacuum of  $\sim 2 \times 10^{-5}$  mm Hg. The finished specimen is sealed off in the frozen state under vacuum. The efficiency of degassing is demonstrated with an example of measuring the spin-lattice relaxation time of water, benzene, cyclohexane, etc. V. Gromov.

SUB CODE: NP, EM

ENCL: 00

Card 2/2

AGISHEV, A.Sh.; ZINYATOV, M.Z.; KASHAYEV, S.-Kh.G.; KUCHERYAVENKO, N.S.;  
SAMIGULLIN, F.M.

Spin-echo spectrometer. Prib. i tekh. eksp. 8 no.1:78-83 Ja-F  
'63. (MIRA 16:5)

1. Kazanskiy pedagogicheskiy institut.  
(Spectrometer)

VALIYEV, K.A.; ZEMEL'YANOV, M.I.; SAMIGULIN, F.M.

Spin echo method of separate determination of the coefficients of progressive diffusion of molecules in a two-component mixture. Zhur. strukt. khim. 5 no.3:371-376 My-Je '64.

(MIRA 18:7)

1. Kazanskiy pedagogicheskiy institut.

SAMIGULLIN, F.M.; AGISHEV, A.Sh.

Apparatus for degassing liquids and solutions. Prib. i tekhn. eksp.  
9 no.1:224-225 Ja-F '64. (MIRA 17:4)

1. Kazanskiy gosudarstvennyy pedagogicheskiy institut.

PANCHENKOV, G.M.; SAMIGULLIN, M.Sh.; KOLESNIKOV, I.M.; DOROKHIN, V.P.

Isomerization of  $\alpha$ -ethylnaphthalene to  $\beta$ -ethylnaphthalene  
over a synthetic aluminosilicate catalyst. Zhur.fiz.khim. 39  
no.10:2614-2617 0 '65. (MIRA 18:12)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti Imeni Gubkina. Submitted February 27, 1965.

L 53671-65 EWT(m)/EPF(c)/ENP(j)/T Pc-4/Pr-4 RM

ACCESSION NR: AP5009312

S/0191/65/000/004/0013/0015

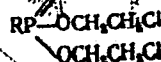
AUTHORS: Kafengauz, I. M.; Samigulin, F. K.; Kafengauz, A. P.

TITLE: A study of the reaction of hydroxyl-bearing oligomers of propylene oxide with esters of phosphoric acid

SOURCE: Plasticheskiye massy, no. 4, 1965, 13-15

TOPIC TAGS: phosphorous, organic polymer, phosphoryl group, polymer, oligomer, organophosphorous additive

ABSTRACT: Reactions of hydroxyl-bearing oligomers with esters of phosphoric acid were studied. The polyesters based on di- $\beta$ - $\beta'$  chloroethylene esters of phosphoric acid are given by the general formula



where R=H,  $\text{CH}_3$ ,  $\text{CH}_2 = \text{CH}$ . Reaction products were formed at temperatures of 180,

200, and 220C. In each of five test specimens, the percentages of products and byproducts were measured. The acid number of the polymer reaction product was obtained, and the calculated and observed hydroxyl group percentages were

Card 1/2

L 53671-65

ACCESSION NR: AP5009312

tabulated. Phosphorizing agents used in the tests were the phosphorous-bearing acids DVK, DMK, and DFK. The effect of three catalysts upon the reactions was measured by noting reaction product percentages, polymer product acid numbers, and hydroxyl group concentration in the polymer product. The catalysts tested were  $\text{BF}_3 \cdot \text{O} \square$ ,  $\text{MgCl}_2$ , and sodium. Polymer product quantities found indicate that  $\text{BF}_3 \cdot \text{O} \square$  effectively catalyzes the reactions. The authors thank Ya. A.

Tsarfin and T. A. Polyakova for developing methods and conducting the experiments. Orig. art. has: 1 formula, 2 equations, and 2 tables.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MT, OC

NO REF SOV: 007

OTHER: 002

R

BAB

Card 2/2

SAVICHINA, Ye. F.

AGRANOVSKAYA, I.A.; ASATKINA, Ye.F.; BOYTSOVA, Ye.P.; BOCHARNIKOVA, A.D.;  
BOYTSEL', Z.A.; IVANOVA, Ye.A.; KALASHNIKOVA, V.A.; KLIMKO, S.A.;  
KRUCHININA, N.V.; MALYASOVA, Ye.S.; MARKOVA, L.G.; MARTYNOVA, Z.I.;  
POKROVSKAYA, I.M.; POLUKHINA, V.A.; ROMANOVSKAYA, G.M.; SAMIGULINA,  
Ye.P.; SEDOVA, M.A.; SIGOVA, N.N.; STEL'MAK, N.K.; PERLIN, S.S., re-  
daktor izdatel'stva; GUROVA, O.A., tekhnicheskii redaktor.

[Atlas of Oligocene spore and pollen complexes in various regions of  
the U.S.S.R.] Atlas oligotsenovykh sporovo-pyl'tsevykh kompleksov  
razlichnykh raionov SSSR. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry  
po gologii i okhrane nedr. 1956. 312 p. (Leningrad, Vsesoiuznyi  
geologicheskii institut. Materialy, no.16) (MLRA 10:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskii institut  
Ministerstva geologii i okhrany nedr SSSR. (for Asatkina, Boytsova,  
Kalashnikova, Kruchinina, Pokrovskaya, Romanovskaya, Sedova, Stel'-  
mak). 2. Yuzhno-Ural'skoye geologicheskoye upravleniye (for Sigova)  
3. Ural'skoye geologicheskoye upravleniye (for Agranovskaya, Bocharni-  
kova, Martynova, Polukhina, Samigulina). 4. Trest "Zapsibneftegeologiya"  
(for Boytsel', Ivanova, Klimko, Markova). 5. Geograficheskii fakul'tet  
Leningradskogo gosudarstvennogo universiteta (for Malyasova)  
(Pollen, Fossil) (Spores (Botany), Fossil)



SAMIGULINA, Ye.P.

Pollen morphology of certain modern plants. Trudy Gor.-geol. inst.  
no. 28:37-61 '57. (MIRA 11:10)

(Pollen)

SAMIGULINA, Z.P., assistant

Presentation of the fundamental theorems of the theory of probability  
in school. Trudy Chel. gos. ped. inst. 2:88-98 '64.

Theory of combinations. Ibid.:99-108

(MIRA 18:9)

SAMIGULLIN, A. S.

SOV/93-58-10-17/19

11(0)

AUTHOR: Samgullin, A.

TITLE: A Valuable Book on the Economics of Drilling (Tsennaya kniga po ekonomike bureniya)

PERIODICAL: Neftyanoye khozyaystvo, 1958, Nr 10, pp 70-71 (USSR)

ABSTRACT: This is a review of the book "Rezervy snizheniya stoimosti burovykh rabot" (Possibilities of Reducing the Cost of Drilling Operations) written by G.F. Shafigov, D.Sh. Davletbayev, and V.F. Shmatov and published by Gostop-tekhizdat in 1958. The authors obtained their data from the 'Tymazaburneft' Trust which carries out over 50 percent of the drilling work in the Bashkir ASSR.

Card 1/1

SAMIGULLIN, A. S.

New technology and labor productivity in extracting oil in  
Bashkiria. Sots.trud 5 no.3:60-64 Mr '60. (MIRA 13:6)  
(Bashkiria--Petroleum industry--Labor productivity)

KHAYRULLIN, A.Kh.; LUZIN, V.I.; SAMIGULLIN, A.S.

Compensation for expenditures on geological prospecting.  
Geol. nefti i gaza 6 no.2:23-27 F '62. (MIRA 15:2)

1. Bashkirskiy filial AN SSSR.  
(Petroleum industry—Accounting)

BAYRAK, Konstantin Alekseyevich; SAMIGULLIN, Anvar Samigullich;  
GENKIN, I.B., red.

[Let us increase the economic efficiency of oil-field  
development] Povysim ekonomicheskuiu effektivnost' raz-  
rabotki neftiannykh mestorozhdenii. Ufa, Bashkirskoe  
knizhnoe izd-vo, 1964. 86 p. (MIRA 18:10)

SANIGULLIN, F.G.

Improved circular wrench. Bezop.truda 5 no.1:33 Ja '61. (MIRA 14'2)

1. Trest Al'met'yevburneft'.  
(Wrenches)

S/120/63/000/001/016/072  
E039/E420.

AUTHORS: Agishev, A.Sh., Zinyatov, M.Z., Kashayev, S.-X.G.,  
Kucheryavenko, N.S., Samigullin, F.M.

TITLE: A spin-echo spectrometer

PERIODICAL: Priory i tekhnika eksperimenta, no.1, 1963, 78-83

TEXT: The spin echo spectrometer permits absolute values of important kinetic parameters to be obtained, for example parameters connected with the structure and motion of particles of material, such as the transverse ( $T_2$ ) and longitudinal ( $T_1$ ) times of relaxation of nuclear magnetization and also the coefficient of self-diffusion  $D$  for particles of liquid or gas. When using this spin-echo method the material is located in a nonuniform constant magnetic field  $H_0$  and exposed to a high frequency field satisfying the magnetic resonance condition. The deviation of the direction of magnetization of the sample from the direction of  $H_0$  depends on the duration of the pulse. For a deviation of  $90^\circ$  the HF pulse must satisfy the condition  $\gamma H_1 t_1 = \pi/2$  where  $\gamma$  - gyromagnetic ratio of the resonating nuclei,  $H_1$  - amplitude of HF pulse and  $t_1$  - duration of the pulse.  
Card 1/2



A spin-echo spectrometer

S/120/63/000/001/016/072  
E039/E420

In order to obtain a deviation of  $180^\circ$ , double this pulse length would be required. A detailed description of the apparatus is given. It consists basically of a programming unit which enables six different methods of measurement to be used, a transmitter, a high frequency head and a receiver. The field  $H_0$  is about 3844 Oe and is produced by an Alnico magnet. This field corresponds to a proton resonance frequency of 16.365 Mc/s. Nonuniformity is about 1 Oe in a sample of about 2 cm<sup>3</sup>. The duration of the  $90^\circ$  pulse is about 2  $\mu$  sec. Errors in the measurement of  $T_1$  and  $T_2$  are about 5%. Control measurements were carried out on an aqueous solution of 4 mole/litre  $\text{VOCl}_2$  and values of  $T_1$  and  $T_2$  equal to 160 and 112  $\mu$  sec respectively obtained. For pure de-aerated benzene  $T_1$  was 18.82 sec. Values of  $T_1$  and  $T_2$  from about 20  $\mu$  sec up to 100 sec or more can be measured by this method. There are 6 figures.

ASSOCIATION: Kazanskiy pedagogicheskiy institut  
(Kazan' Pedagogic Institute)

SUBMITTED: February 24, 1962  
Card 2/2

*Samigullin, I.*  
SAMIGULLIN, I.

We are building 40 construction projects on collective farms.  
Sel'.stroil.12 no.12:3 D '57. (MIRA 10:12)

1. Predsedatel' soveta Dzhambul'skoy mezhkolkhoznoy stroitel'noy organizatsii Kazakhskoy SSR.  
(Dzhambul District--Construction industry)

ISHCHENKO, G. N.; KHAMRAKULOVA, K.; SAMIGULLIN, R.

Comparative characteristics of some devices used in determining  
microbial air contamination. Med. zhur. Uzb. no.6:16-18  
Je '62. (MIRA 15:7)

1. Iz kafedry mikrobiologii (zav. - prof. F. I. Shevchenko)  
Samarkandskogo meditsinskogo instituta.

(AIR SAMPLING APPARATUS)

SAMIKHOV, M.

Work organization of oil well drillers under the new conditions.  
Sots. trud 6 no. 2:69-71 F '61. (MIRA 14:2)  
(Bashkiria--Oil well drilling)

SHMATOV, Vasilii Fedorovich; SHTEYNGAUZ, Yevsey Moiseyevich; SAMIKHOV,  
Munir. Mingazhevich; ISAYEVA, V.V., vedushchiy red.; POLOSINA,  
A.S., tekhn.red.

[Potentialities in the use of boring machinery] Rezervy burovoi  
tekhniki. Moskva, Gos.nauchno-tekhn.izd-vo nef. i gorno-topliv-  
noi lit-ry, 1959. 134 p. (MIRA 12:12)  
(Boring machinery)

SAMILKIN, V.D., Cand Tech Sci--(diss) " Study of the interaction <sup>between</sup>  
~~to~~ <sup>and</sup> ~~with soil of the leading~~ <sup>driving</sup> tractor wheels equipped with ~~balloons~~ <sup>tanks</sup> with  
~~superposed~~ <sup>overhead Coqs</sup> ~~balls~~." Mos, 1958. 10 pp (Min of Higher Education USSR.  
Mos Autom <sup>mechanical</sup> ~~obile Techn~~ Inst), 110 copies (KL,25-58,115)

-116-

~~SAMILKIN, V.D., inzh.~~

Testing DT-24 and DT-28 tractors equipped with superposed cleats  
and wheel tires. Trakt. i sel'khozmasb. no.4:6-12 Ap '58.  
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